

## TINA2-D

~16° diffused spot beam optimized for CREE XP-E. Assembly with holder, installation tape and location pins.

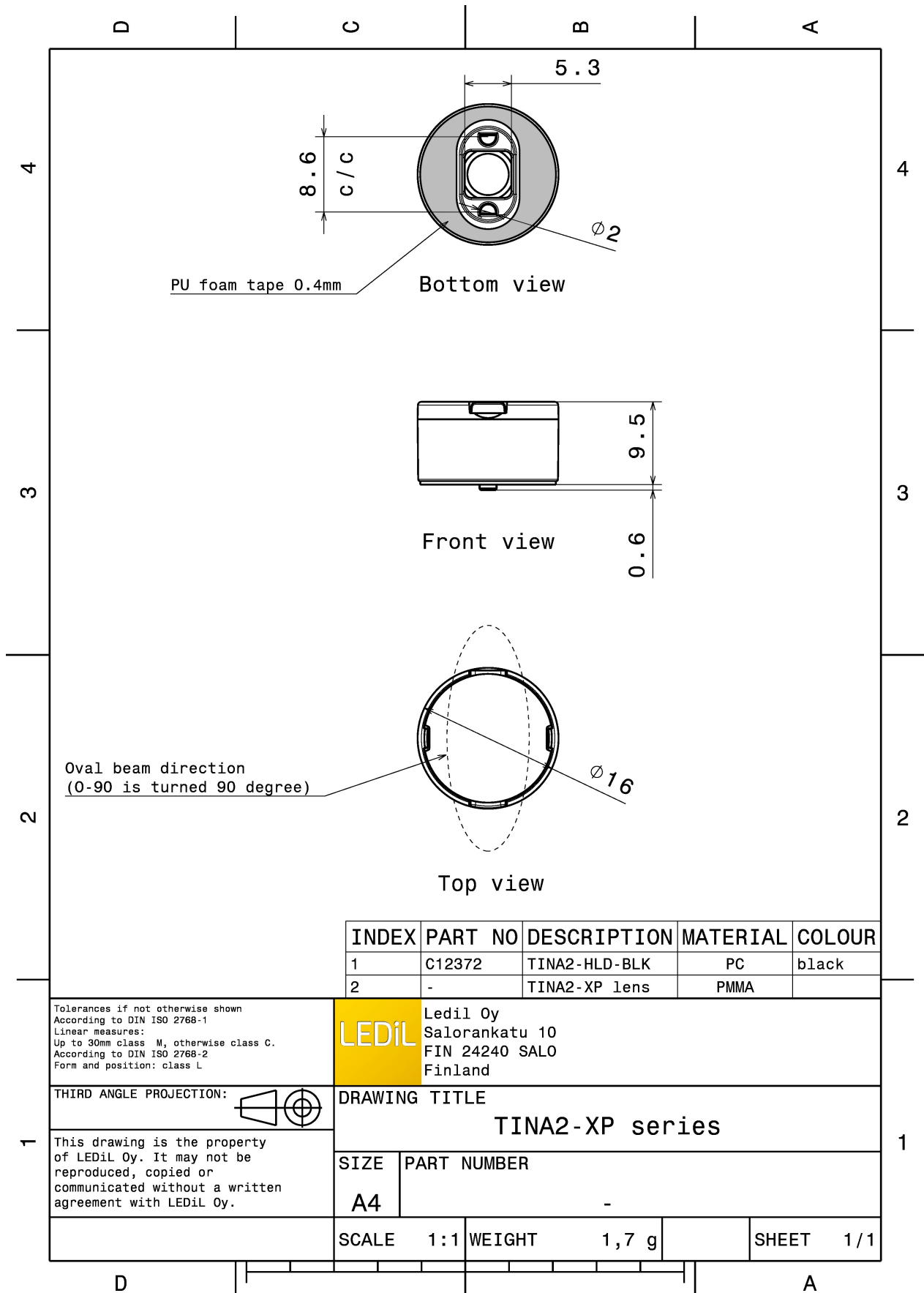
### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 16.0 mm
Height	9.5 mm
Fastening	tape, pin
Colour	black
Box size	451 x 241 x 298 mm
Box weight	8.1 kg
Quantity in Box	4140 pcs
ROHS compliant	yes ⓘ



### MATERIAL SPECIFICATIONS:

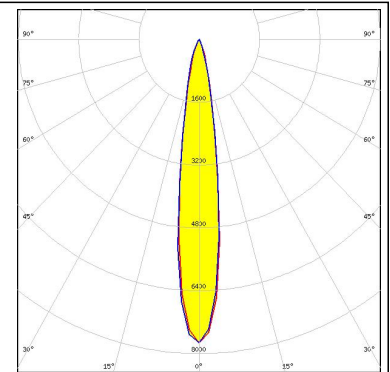
Component	Type	Material	Colour
TINA2-XP-D	Single lens	PMMA	clear
TINA2-HLD-BLK	Holder	PC	black
TINA-TAPE3	Tape	PU tape	black



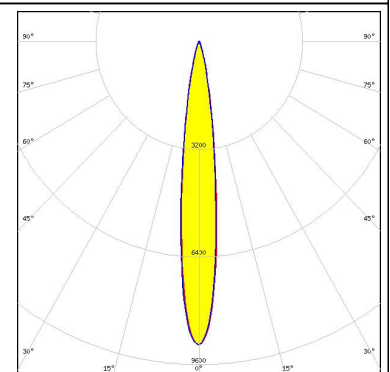
#### PHOTOMETRIC DATA (MEASURED):



LED XB-H  
 FWHM 16.0°  
 Efficiency 86 %  
 Peak intensity 7.700 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



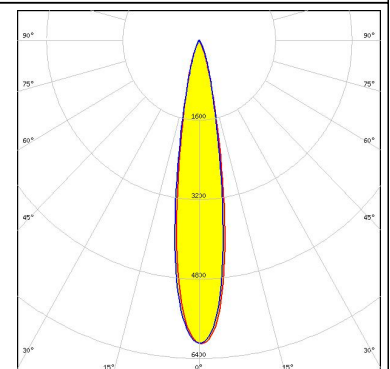
LED XD16  
 FWHM 14.0°  
 Efficiency 82 %  
 Peak intensity 9.000 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON Z ES  
 FWHM 12.0°  
 Efficiency %  
 Peak intensity cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



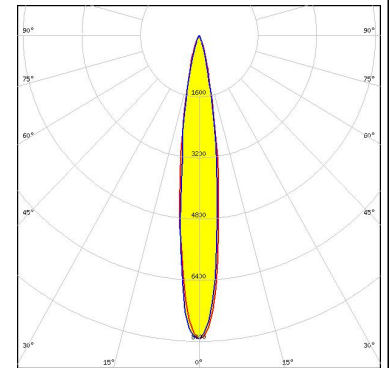
LED NVSxx19B/NVSxx19C  
 FWHM 18.0°  
 Efficiency 87 %  
 Peak intensity 6.100 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### PHOTOMETRIC DATA (MEASURED):

#### OSRAM Opto Semiconductors

LED OSLON Square EC  
FWHM 16.0°  
Efficiency 82 %  
Peak intensity 7.940 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



#### OSRAM Opto Semiconductors

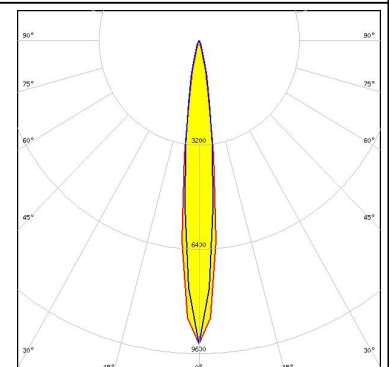
LED OSLON Square EC  
FWHM 16.0°  
Efficiency 87 %  
Peak intensity 6.200 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

#### OSRAM Opto Semiconductors

LED OSLON Square PC  
FWHM 13.0°  
Efficiency 87 %  
Peak intensity 6.300 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

#### OSRAM Opto Semiconductors

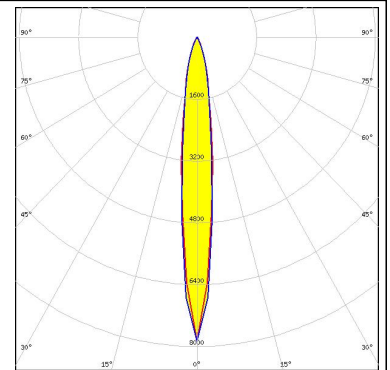
LED OSLON SSL 150  
FWHM 14.0°  
Efficiency 89 %  
Peak intensity 9.300 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



### PHOTOMETRIC DATA (MEASURED):

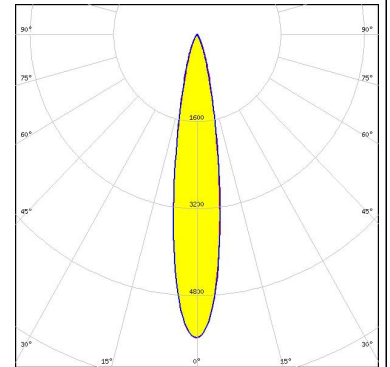
#### OSRAM Opto Semiconductors

LED OSLOM SSL 80  
FWHM 12.0°  
Efficiency 87 %  
Peak intensity 7.855 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



#### SEAGUL SEOUL SEMICONDUCTOR

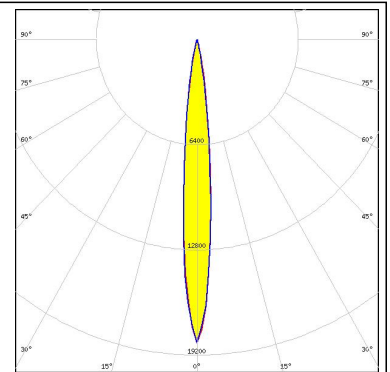
LED Z5M3  
FWHM 18.0°  
Efficiency 86 %  
Peak intensity 5.600 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



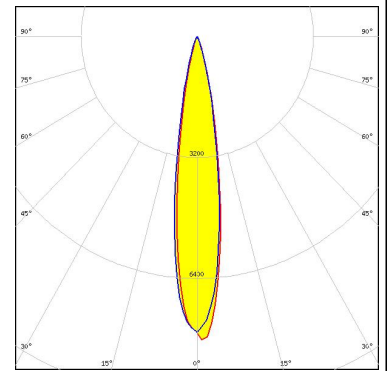
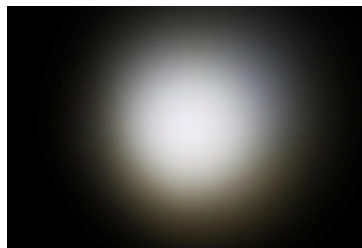
### PHOTOMETRIC DATA (SIMULATED):



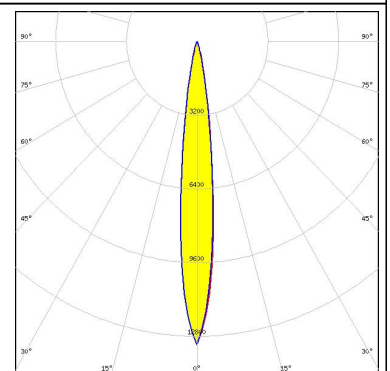
LED XQ-E HI  
 FWHM 11.0°  
 Efficiency 91 %  
 Peak intensity 18.500 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



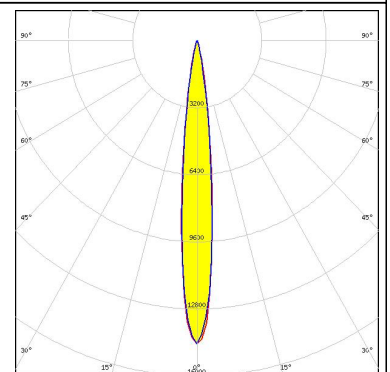
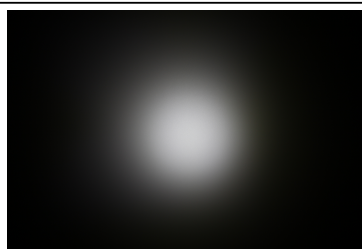
LED Duris S5 (2 chip)  
 FWHM 17.0°  
 Efficiency 92 %  
 Peak intensity 8.030 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED OSCONIQ P 3030  
 FWHM 12.0°  
 Efficiency 91 %  
 Peak intensity 13.173 cd/lm  
 LEDs/each optic 1  
 Light colour Blue  
 Required components:



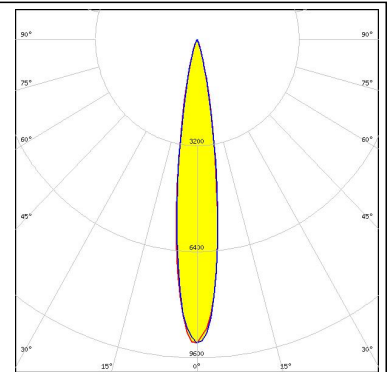
LED OSLOM Square Flat  
 FWHM 12.0°  
 Efficiency 91 %  
 Peak intensity 14.470 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### PHOTOMETRIC DATA (SIMULATED):

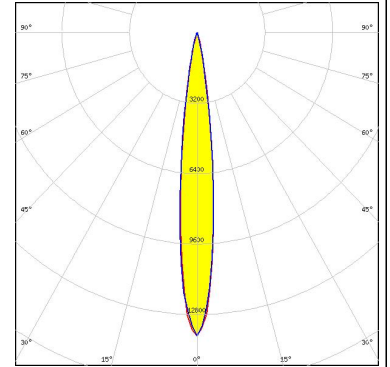
#### SAMSUNG

LED LH181B  
FWHM 16.0°  
Efficiency 92 %  
Peak intensity 9.200 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



SEOUL SEMICONDUCTOR

LED Z8Y15  
FWHM 13.0°  
Efficiency 90 %  
Peak intensity 13.770 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



### GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

### MATERIALS:

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#### LEDiL Oy

Joensuunkatu 13  
FI-24240 SALO  
Finland

#### LEDiL Inc.

228 West Page Street  
Suite D  
Sycamore IL 60178  
USA

#### Local sales and technical support

[www.ledil.com/  
where\\_to\\_buy](http://www.ledil.com/where_to_buy)

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